



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240



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## DECISION

Keith Wilkinson, et al  
1040 E. 10<sup>th</sup> Ave, Ste. 208  
Broomfield, Colorado 80020

### **August 14, 2008 Competitive Oil & Gas Lease Sale Protest Of Parcels COC73064 through COC73094 Is Dismissed**

NOTE: Due to high volume of protests, the official BLM protest response is posted on the BLM Colorado website, [co.blm.gov](http://co.blm.gov). This paper copy is provided to you as a courtesy.

Your letter was received in our office on July 26, 2008, protesting the above named parcels offered in the August 14, 2008, Competitive Oil & Gas Lease Sale.

#### **Protest Point 1: BLM violated NEPA by failing to adequately analyze a reasonable range of alternatives and the impacts resulting from the Resource Management Plan Amendment.**

##### **Response:**

The Bureau of Land Management (BLM) analyzed an adequate range of alternatives and developed a Resource Management Plan Amendment (RMPA) based on suitable analysis, as well as on public and cooperating agency input. While there are many variations that might have been analyzed in the planning process, the BLM is only required under National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations to address a reasonable range of alternatives (see 40 C.F.R. § 1502). The BLM is not required to address each variation; especially those put forth after the Proposed RMPA and Final Environmental Impact Statement (FEIS) have been published. The CEQ addressed this issue as follows, "For some proposals there may be a very large or even an infinite number of reasonable alternatives. When there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives, must be analyzed and compared in the EIS." (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 46 Fed. Reg. 18,026, 18,031 (March 23, 1981)).

The range of alternatives considered throughout the planning process constituted a full and

reasonable spectrum. The range included management options ranging from emphasizing environmental preservation (Alternative II, which considered no leasing atop the plateau and protective stipulations below the cliffs) to a development-focused alternative (Alternative V). The Proposed Action Alternative contained key environmentally protective elements of alternatives analyzed in the Draft RMPA/EIS including limiting development to ridgetops with slopes less than 20 % limiting development to 350 acres at any given time, and designation of four Areas of Critical Environmental Concern covering 21,034 acres. (See Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 46 Fed. Reg. 18,026, 18,031 (March 23, 1981)). The BLM considered a broad range of analysis and public input in approving a RMPA that represents a balanced management strategy protecting resources and allowing for commodity use.

Regarding impact assessment, the BLM adequately analyzed direct, indirect and cumulative impacts to the extent that they were applicable to the resources affected. The PRMPA/FEIS analyzes the impacts of leasing-level decisions and addresses cumulative impacts relating to such leasing, based on a reasonable projection of activities. Your protest does not provide any new and significant information not considered during the analysis of the RMPA. Further site specific NEPA analysis would be required when specific development and production activities are proposed. Such specific analyses would provide for a more thorough examination of impacts related to the development of the lease parcels and provide for the application of site-specific conditions of approval.

The best management practices (BMPs) and other mitigation measures incorporated into the RMPA represent a range of methods that are proven to be effective in specific situations. At the implementation stage—e.g., preparation of master development plans for ridge-by-ridge development atop the plateau—BLM resource specialists will select the BMPs and other mitigation measures best suited to location-specific, resource-specific, and project-specific factors. Monitoring and adaptive management practices will be employed where appropriate. If development in the planning area exceeds the impacts analyzed, then the BLM would be required to produce further NEPA analysis and possibly, an amendment to the Glenwood Springs Resource Management Plan (note: the Glenwood Springs RMP was amended and supplemented in 1990 and 1999 to address issues related to oil and gas development). BLM resource management plans can be amended when new significant information becomes available or where a threshold of impacts is reached in an area.

#### **Protest Point 2: BLM ignored public comment**

##### **Response:**

The BLM involved local communities, Garfield County, and the State of Colorado extensively as cooperating agencies throughout the process leading to the final decision. Given varying perspectives, consensus among all parties was not achieved, but all concerns were addressed and incorporated to the extent practicable within the range of alternatives considered and analyzed, as required by the National Environmental Policy Act (NEPA). Indeed, the concept of phased and clustered ridgetop development atop the plateau, with a maximum of 350 acres (1 percent of the area) allowed to be in a disturbed condition at any one time—which is the cornerstone of the Resource Management Plan Amendment and final Environmental Impact Statement (PRMPA/FEIS)—was based heavily on specific input by the Colorado Department of Natural Resources (CDNR). Although the BLM acknowledges a large amount of support for protecting the top of the Roan Plateau from natural gas drilling, it is also important to note that a significant

portion of the local community and other stakeholders expressed a desire to see as much production of natural gas from BLM lands in the planning area as practicable.

The Draft EIS considered a wide spectrum of alternatives based on input from concerned citizens, local communities and cooperating agencies. In the Draft EIS (DEIS), the BLM addressed an alternative (Alternative I) that would not allow oil and gas development on top of the plateau. Alternative II of the DEIS included protection of wilderness characteristics and natural values through the use of No Ground Disturbance/No Surface Occupancy (NGD/NSO) stipulations, as well as the designation of four large Areas of Critical Environmental Concern (ACECs) proposed to address visual, fish, wildlife, and plant values. Alternative III of the DEIS deferred drilling on the Upper Plateau and included mandatory protections for lands below the cliffs.

**Protest Point 3: BLM's leasing decision disregarded and violated various environmental laws, including the National Environmental Policy Act.**

**Response:**

BLM's oil and gas leasing process must comply with the National Environmental Policy Act (NEPA) requirements to analyze and disclose the impacts of oil and gas activities. The oil and gas leasing program in each field office complies with NEPA and The Federal Land Policy and Management Act of 1976 (FLPMA) through a tiered decision making process. This process is provided for in the Council on Environmental Quality (CEQ) guidelines for implementation of NEPA, found at 40 CFR 1508.28, "Tiering". This tiered process begins with the preparation of a Land Use Plan (LUP), Resource Management Plan (RMP), or RMP Amendment accompanied by an environmental impact statement (EIS) that analyzes potential environmental impacts of the development of leases that may be offered under the plan. Prior to the actual offering of the land for oil and gas lease sales, BLM conducts a second, more site-specific tier of NEPA analysis. For the Lease Sale, the field offices prepared a Document of Land Use Plan Conformance and NEPA Adequacy (DNA), as required by BLM Washington Office Instruction Memorandum Nos. 99-149 and 2001-062, to assure that any lands offered in the Lease Sale are in conformance with existing RMPs and any changes in circumstances since the preparation of the RMP/EIS have been adequately considered. The BLM complied with all requirements of NEPA and the CEQ in issuing lease decisions.

**Protest Point 4: BLM failed to properly consider impacts from ozone and the impacts to air quality from development of oil and gas on the Roan Plateau**

**Response:**

The air quality analysis conducted for the Roan Plateau RMPA used the generally accepted practice for air quality modeling analyses in BLM EISs. The BLM used multiple models for its near-field and far-field analyses to reach its conclusions about air impacts. The California Puff Dispersion Model (CalPuff), meteorological data, and other methodologies used in the analysis were put forth by the BLM in an analysis protocol that was developed in consultation with an inter-agency team of air quality specialists (stakeholders include air staffs from the BLM, Forest Service, Utah Department of Environmental Quality, CDPHE-Air Quality Control Division, National Park Service and the EPA). The general consensus reached by this stakeholders group is reflected in the protocol and the methodologies used and the results of the final analysis (see Section 4.2.5 of the FEIS).

The Secretary of the Interior (through the BLM) met all legal responsibilities under NEPA to describe existing air quality conditions (Affected Environment) and to predict potential direct,

indirect, and cumulative air quality impacts from the Proposed Action and Alternatives (Environmental Consequences), as required by CEQ regulations. In addition to predicting the maximum air quality impacts within close proximity to the proposed activities, the air quality impact analysis also examined potential air quality impacts at twelve distant mandatory Federal PSD Class I areas and ten other distant “sensitive” locations. BLM compared direct impacts to Class I and Class II increments to assess their significance under NEPA. BLM did not conduct regulatory increment consumption analyses. The most recent and representative data were used to define the Affected Environment for NEPA purposes. BLM assumed emissions from operations in 2000 or 2001 were captured in state monitoring when establishing the Affected Environment. This approach is acceptable in light of state’s Clean Air Act authority to monitor air quality. Under the Clean Air Act, the authority and responsibility for conducting regulatory PSD Increment Consumption Analysis rests with the appropriate air quality regulatory agency (e.g. CDPHE).

During the scoping phase of the draft RMPA/EIS that began in November of 2000, ozone impacts were not identified (either internally or externally to BLM) as an issue warranting analysis in the EIS. At the time, BLM concluded that analysis of ozone impacts was not (1) necessary to make a reasoned choice between alternatives, or (2) an issue associated with a significant direct, indirect, or cumulative impact. Therefore, in accordance with the NEPA scoping procedures, BLM determined an analysis of ozone impacts was not warranted in the RMPA/EIS.

Subsequent to the scoping for the RMPA/EIS, the BLM prepared a draft air quality assessment protocol. BLM submitted the protocol to several agencies, including Colorado Department of Public Health and Environment (CDPHE) and EPA, for review. CDPHE, the agency delegated with the responsibility for monitoring ozone and enforcing applicable standards under the Clean Air Act, agreed with BLM that “ozone modeling is outside the scope of this project” (December 20, 2002 memorandum from Nancy Chick, CDPHE to Mike Silverstein, CDPHE). Air quality specialists for the BLM predicted that most emissions from gas wells on the Roan Plateau would produce methane and ethane gas. These emissions are not criterion in the formation of ozone. The BLM did model other precursors of ozone such as NO<sub>x</sub>. However, given the high potential ratio of NO<sub>x</sub> to volatile organic compound emissions such as methane and ethane, significant ozone formation was not likely to occur. Air quality specialists for the BLM determined at the scoping phase that ozone creation would not be a significant impact resulting from the leasing decision.

Further, at the time (circa 2003) the air quality assessment for the PRMPA/FEIS was performed, a reliable tool for assessing ozone impacts from oil and gas developments was not available. The method recommended by EPA for predicting ozone impacts, screening tables (Scheffe method), was determined by BLM to be too conservative and would likely overstate potential impacts. Therefore, the BLM determined screening tables would not provide results of any real value. The Scheffe method, though initially used in the Jonah Infill air quality analysis, is no longer used. The only remaining tool to assess future ozone impacts was then a photochemical grid model. However, the necessary inputs for utilizing a photochemical grid modeler were not available. In particular, the oil and gas area source emission inventories necessary to perform photochemical grid modeling for ozone were not available. In fact, work on these inventories did not begin until approximately 2005, after the air quality assessment for the Draft RMPA/EIS began. Moreover, the earliest version of the oil and gas areas source emissions inventories were

developed to support visibility, and not ozone analysis, and as such lacked the necessary information, particularly for volatile organic compounds. Analysis of ozone with photochemical grid models requires a comprehensive regional emission inventory for all ozone precursors. As this was not available at the time, and the Scheffe method had been discredited, it was not possible for the BLM to analyze future ozone impacts in a technically or scientifically defensible manner.

Finally, prior to the signing of the June 2007 or March 2008 Record of the Decisions, the BLM was not presented with significant new circumstances or information relevant to RMPA/EIS effects on ozone in the region that would have warranted an ozone analysis. Neither information about ambient ozone concentrations nor specific information about oil and gas emission sources would have compelled the BLM to conduct an ozone analysis. The BLM determined that ozone creation did not warrant analysis as an impact resulting from the leasing decision. In fact, monitoring data for the nearest continuous monitor located in Gothic indicated that the design value for ozone had been trending downwards.

Since the PRMPA/FEIS was performed, monitoring data has demonstrated additional regional ozone impacts. However, this data does not significantly affect the predicted impacts of the leasing decision since the BLM previously determined leasing would not result in the creation of significant ozone impacts. More recent ozone monitoring data for the region, such as that collected by the USFS in White River National Forest, was not available at the time. Currently, the annual monitoring data produced does not contain sufficient data points over time to support accurate ozone modeling. The ozone analysis conducted for Pinedale Anticline EIS is not appropriate for the Roan Plateau given substantial differences in geography and the greater level of development density proposed for Pinedale Anticline. Similarly, information related to substantial oil and gas development (and the associated emissions) in the Piceance Basin or other nearby basins was not available or reasonably foreseeable at the time. Now that these developments are more fully defined, and the capability exists to model ozone impacts, both individual and cumulative, ozone will be analyzed in planning activities currently underway (e.g., the White River Resource Area Resource Management Plan Amendment). In addition, the BLM will perform additional NEPA analysis prior to authorizing any site-specific development. This analysis will consider ozone and any other air emissions associated with that activity. These emissions will be regulated by the CDPHE, and if necessary controlled to comply with applicable air quality standards.

**Protest Points 5: The BLM violated NEPA by ignoring cumulative impacts that could occur more than 20 years from now**

**Response:**

The PRMPA/FEIS analyzed the impacts of leasing-level decisions and addresses cumulative impacts relating to such leasing, based on a reasonable projection of activities. Further site-specific NEPA analysis will be required when specific exploration, development, and production activities are proposed. Such specific analyses would provide for a more thorough examination of impacts related to the development of the lease parcels and provide for the application of site-specific conditions of approval.

The BLM's policy in assessing the likelihood of development for mineral resources is articulated in the BLM's "Planning for Fluid Mineral Resources Handbook" (H-1624-1). Guidance from this handbook addresses the projection of reasonably foreseeable development under existing

management conditions. The guidance directs an interdisciplinary team, “to project management activities and actions, including developments, which are likely in the planning area over the life of the plan (i.e., generally 15 to 20 years or whatever has been determined to be the planning horizon or timeframe for the RMP) assuming continuation of existing management.” Also see National Wildlife Federation et al., 170 IBLA 240 (2006); Wyoming Outdoor Council, et al., 164 IBLA 84 (2004); BLM Land Use Planning Handbook H-1601-1(2005); and WO IM 2004-89.

The RMPA was prepared following the direction in the aforementioned guidance.

The Reasonably Foreseeable Development scenario (RFD) is a planning tool which represents the BLM’s assumptions regarding unconstrained development potential. The RFD assumes that only standard stipulations and technical limitations would be in place and thus, does not include the overlay of restrictions, stipulations, and timing. Drilling technologies may change dramatically over the course of the next twenty years, making far reaching predictions about the number of wells obsolete. Therefore, environmental impacts related to those wells are equally speculative. The 210-well figure used for analysis in the PRMPA/FEIS is based on the area projected to be available for drilling, seasonal constraints, limited drilling rigs, and the difficulty of access. Beyond 20 years, the areas available for drilling and locations of wells become highly speculative. The area projected to be available for drilling assumes a 350-acre maximum surface disturbance at any one time, with subsequent reclamation sufficient to minimize surface water runoff, prevent invasive weeds and attract wildlife. Most of the development in the first twenty years is anticipated to occur below the rim adjacent to producing reservoirs where access is not as constrained by seasonal considerations and land ownership.

If development in the planning area exceeds the impacts analyzed in the plan, then the BLM may be required to produce further NEPA analysis and possibly, an amendment to the Glenwood Springs RMP (note: the Glenwood Springs RMP was amended and supplemented in 1990 and 1999 to address issues related to oil and gas development). A BLM RMP can be amended at any time should pertinent and significant new information become available, or where a threshold of impacts is reached in an area. Further, though an oil and gas lease may extend beyond the RFD projection, Section 6 of the Lease Form provides for environmental protection applied to individual leases. Stipulations placed on the lease at issuance continue to apply throughout the life of the lease (unless modified or waived, as provided by regulation). In the future, additional protective measures in the form of conditions of approval (COAs) will be applied if needed, based on site-specific analysis.

The Bureau of Land Management (BLM) provided comprehensive analysis of indirect and cumulative impacts in the final Resource Management Plan Amendment (RMPA) and Environmental Impact Statement (EIS) for the Roan Plateau Planning Area, which is the National Environmental Policy Act (NEPA) analysis document under which the leases were made available for sale. The discussion of environmental consequences for the various resources addressed in Chapter 4 (“Environmental Consequences”) specifically includes subsections addressing indirect and cumulative impacts.

The BLM addressed cumulative impacts to the extent that they were applicable to the resources affected (and were significant) by the decisions in the Roan Plateau RMPA, consistent with 40 C.F.R. § 1508.25(a)(iii)(2). This analysis identifies those significant impacts caused, in whole or

in part, by development activities which would be authorized in this RMPA. The BLM's decision identifies comprehensive mitigation and management measures to reduce, minimize, or avoid significant adverse impacts.

Accordingly, on behalf of the Department of the Interior, I dismiss your protest. If you have any questions about this response, contact Duane Spencer, Chief, Branch of Fluid Minerals at 303.239.3753.



C. Stephen Allred  
Assistant Secretary  
Land and Mineral Management

cc:

State Director, Colorado State Office  
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